

CLAIMS

1. A display apparatus, comprising:

5 a substrate comprising a metal layer,
 a plurality of scanning signal lines and a
 plurality of data signal lines which intersect with
 each other and are disposed on said substrate,
 a display device which has a display element
10 located at an intersecting position of said scanning
 and data signal lines and is driven by a voltage
 signal supplied to said scanning and data signal lines,
 a plurality of coils disposed in parallel with
 each other on said substrate, and
15 a circuit for detecting currents passing
 through said plurality of coils by the action of
 electromagnetic induction of an electromagnetic wave
 locally generated at a surface of the display device
 to determine a generation position of the
 electromagnetic wave by a position of said coils
20 through which the currents pass.

2. An apparatus according to Claim 1, wherein
said substrate is a metal plate.

25

3. An apparatus according to Claim 1, wherein
said substrate is a metal layer coated with an

insulating material.

4. An apparatus according to any one of Claims
1 - 3, wherein said plurality of coils are disposed
5 between said substrate and substrate display device.

5. An apparatus according to any one of Claims
1 - 4, wherein said plurality of coils are provided in
two layers which determine an X coordinate and a Y
10 coordinate, respectively, of the generation position
of the electromagnetic wave.

6. An apparatus according to any one of Claims
1 - 5, wherein said display device includes a pair of
15 electrodes supplied with a voltage by said scanning
and data signal lines, at least one of the electrodes
being disposed on said substrate, and a medium which
is disposed between the electrodes and contains
therein charged particles.

20

7. A display apparatus, comprising:
'a substrate comprising a metal layer which has
an electromagnetic wave transmissive structure,
a plurality of scanning signal lines and a
25 plurality of data signal lines which are disposed on
said substrate,
a display device which is disposed on said

substrate in a matrix and is driven by a voltage signal supplied to said scanning and data signal lines,

a plurality of coils disposed, opposite from said display device, in parallel with each other on
5 said substrate, and

a circuit for detecting currents passing through said plurality of coils by the action of electromagnetic induction of an electromagnetic wave locally generated at a surface of the display device
10 to determine a generation position of the electromagnetic wave by a position of said coils through which the currents pass.

8. An apparatus according to Claim 7, wherein the
15 metal layer is a metal sheet provided with a through-hole.

9. An apparatus according to Claim 7, wherein the metal layer is a sheet comprising metal fiber woven
20 into mesh.

10. An apparatus according to Claim 7, wherein the metal layer is a metal sheet provided with an unevenness.

11. An input apparatus, comprising:

a substrate comprising a metal layer,

a plurality of scanning signal lines and a plurality of data signal lines which intersect with each other and are disposed on said substrate,

5 a display device which has a display surface located at an intersecting position of said scanning and data signal lines and is driven by a voltage signal supplied to said scanning and data signal lines,

10 a pen which designates a position on the display surface and generates an electromagnetic wave locally at the designated position at the same time,

a plurality of coils disposed in parallel with each other on said substrate, and

15 a circuit for detecting a current passing through said plurality of coils by the action of electromagnetic induction of the electromagnetic wave locally generated at the display surface with the pen to determine a generation position of the electromagnetic wave by a position of said coils through which the current passes.